

**EXPERT SYSTEM FOR CLASSIFYING SHARIAH
COMPLIANCE E-BUSINESS COMPANIES**

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ABSTRAK

eBiz xSys adalah sistem pakar yang dibangunkan bagi memenuhi objektif penyelidikan ini. Terdapat tiga objektif penyelidikan ini dijalankan. Objektif utama adalah untuk membangunkan sistem pakar yang dapat mengklasifikasikan perniagaan yang dijalankan atas talian (internet) samada memenuhi kehendak Shariah ataupun tidak. Selain itu, penyelidikan ini juga bertujuan untuk mengembangkan atau memperluaskan skop sijil Halal kepada perniagaan jenis ini. Di samping itu, ia juga bertujuan untuk menghasilkan satu panduan kepada pihak pengurusan perniagaan ini mengenai cara, kaedah dan langkah-langkah yang perlu atau boleh di ambil untuk memastikan perniagaan yang mereka jalankan adalah berasaskan Shariah.

Penyelidikan yang dijalankan ini amat berguna bukan sahaja kepada pihak pengurusan perniagaan tersebut, tetapi ia juga penting kepada pengguna yang lainnya seperti pembeli (consumer). Ini adalah kerana, hasil kajian dapat digunakan dan diaplikasikan oleh pihak pengurusan perniagaan manakala pembeli pula dapat melihat senarai perniagaan yang telahpun diklasifikasikan sebagai berlandaskan Shariah menerusi portal komuniti yang dibangunkan.

Hasil daripada kajian ini bukan sahaja melahirkan sebuah sistem pakar yang dapat mengkategorikan perniagaan-perniagaan ini kepada berlandaskan Shariah atau tidak. Malah, ia juga secara tidak langsung telah menyediakan panduan kepada pihak pengurusan untuk menjadi sebahagian daripada perniagaan yang berlandaskan Shariah. Ini secara tidak langsung akan dapat menambahkan keuntungan mereka. Kajian ini juga telah menghasilkan sebuah portal komuniti yang dapat membantu para pembeli mendapatkan maklumat mengenai status Halal sesebuah syarikat dan perniagaannya.

ABSTRACT

eBiz xSys is an expert system that has been developed in order to meet the objective of this research. There are three objectives for this research. The main objective is to develop an expert system that classify Shariah compliance an e-business (business that runs on the internet) companies. Besides, this research also meant to spread and widen the scope of Halal certificates to this kind of business (e-business). Furthermore, it's purpose were also to produce a guideline to the e-business management on how to comply themselves with Shariah and the steps that need to be taken in order to ensure their e-business is comply with Shariah.

The research that has been developed is not only useful to the top management of e-business companies. In fact, it is also very useful to other end users such as buyers or consumers. It is because of the results from the research. It can be used and applied by the management of the business whilst consumer may have the lists of e-business that has been classified as Shariah compliance e-business companies through community portal that has been developed. This list can helps consumers to prioritize their preferences in choosing right company.

The results from this research not only established an expert system called eBiz xSys that can classified these e-businesses as comply with Shariah or not. In fact, it has produce a guideline to be followed by e-business management to be part of the business that comply with Shariah. This can helps them increase their profits as consumers nowadays trusts Halal products and services. The research also developed a community portal that helps consumers getting Halal status on a company and its business.

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TABLE OF CONTENTS

TITLE	PAGE
PERMISSION TO USE	i
ABSTRAK (BAHASA MELAYU)	ii
ABSTRACT (ENGLISH)	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	v
LIST OF FIGURES	vii
1.0 INTRODUCTION	
1.1 Background	4
1.2 Problem Statement	4
1.3 Objectives	5
1.4 Scope	5
1.5 Significance of the Study	6
2.0 LITERATURE REVIEW	
2.1 Halalisation	8
2.2 E-Business	12
2.3 Web Based Expert System	15
3.0 PRINCIPLES IN ISLAMIC BUSINESS	
3.1 Introduction	20
3.2 Islamic Business Ethics	21
3.3 Shariah Compliance Aspects	24
3.4 Characteristics of Shariah Compliance E-Business	28

4.0	METHODOLOGY	
4.1	Problem Assessment	35
4.2	Knowledge Acquisition and Analysis	36
4.3	Design and Implementation	37
4.4	Testing	38
4.5	Documentation	38
4.6	Maintenance	38
5.0	SYSTEM DESCRIPTION	
5.1	Overview	39
5.2	System Analysis and Design	43
5.3	System Architecture	46
6.0	RESULTS AND FINDINGS	
6.1	Halal Certification	48
6.2	Shariah Compliance E-Business Guidelines	48
6.3	eBiz xSys	49
	6.3.1 Correctness and Accuracy	50
6.4	eBiz xSys Portal	51
7.0	CONCLUSION AND FUTURE WORK	
7.1	Features and Benefits	53
7.2	Conclusion	55
7.3	Recommendation and Future Work	56
8.0	REFERENCES	58
9.0	APPENDICES	
	Appendix A: Interview Transcript with Ustaz Hj. Zamri bin Hashim	64
	Appendix B: System Manuals.	68

LISTS OF FIGURES

FIGURES	TITLE	PAGE
Figure 1.1	The scope of the research.	6
Figure 2.1	Multi-tier architecture of basic e-business application system.	12
Figure 2.2	Basic structure of web based application system.	18
Figure 4.1	Research Methodology.	35
Figure 5.1	Internet Connection.	40
Figure 5.2	Availability and accessibility of the expert system.	41
Figure 5.3	Flow chart that shows the work flow of the expert system.	42
Figure 5.4	Rule-based expert system model.	44
Figure 5.5	Forward chaining inference process.	45
Figure 5.6	System Architecture.	43
Figure 6.1	Expert System.	50
Figure 6.2	eBiz xSys Portal.	52
Figure 7.1	The distributed access from the internet.	54

CHAPTER ONE

INTRODUCTION

This chapter presents the overview of study that introduces the motivation and related approaches. In addition, this chapter also includes the problem statement, objectives, scope and significance of study. This chapter will explain the background of the research, the importance of the research, the basic flow of the research and the development of the research project. The problem statements, objectives, significance of the projects and scopes are also presented in this chapter.

1.0 INTRODUCTION

Halal is an Arabic term meaning 'lawful' or 'permissible'. It is not only encompasses food and drink, but all matters of daily lives are taken into account. As the Halal market continues to expand, the integrity of the supply chain becomes an increasingly important issue. With major stakeholders at both the production and retail ends of the supply chain, the Halal sector naturally emerging as one of the most rapidly developing links in the Halal value-chain.

In meeting the growing demands for Halal food products, the major players are likely to demand the strictest compliance to the rules of Halal from every angle. Full 'farm-to-fork' Halal compliance will require a secure supply chain, with the ability to track where the product has been, from raw materials to finish product and then continue to the point it leaves the manufacturing plant right through to the supermarket shelves half way across the globe.

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confirmation will help consumer to give higher priorities to Halal e-business companies in choosing their products or services.

In certain condition, there exists two or more e-business that provides the same products and services that has been classified into Shariah compliance e-business companies in the database. Therefore, for future enhancement, this expert system is suggested to provide accuracy on the classification it's made. For the accuracy, another interviews or meetings should be done with the domain expert to find the best attributes that can best describes the accuracy of the classification.

After accuracy function is provide, this project can be integrated with soft computing technique such as fuzzy logic in order to rank and give priorities to certain e-business companies (if they sell same products or services) before displaying the results to consumer. This can help consumer prioritize and narrow down their preferences.

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